

# ADVERTISING AS A DETERMINANT OF FAMILIES AND CHILDREN'S FOOD CHOICES

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## Abstract

The focus of this study is on promoting healthy eating habits and awareness of the influence that advertising has on these choices.

Since the second half of the twentieth century, it has been recognized that the eating habits of the entire population have changed. In particular, food includes foods with a higher sugar, fat and salt content. Several factors have influenced this change, among which are the media, the power fast-food type and more sedentary lifestyles. These dietary habits associated with the sedentary lifestyle have caused the increase of the obesity of the children. This problem has received the attention of several entities, among them World Health Organization (WHO).

Considering that school plays a fundamental role, helping children to be aware on the marketing and advertising influence, and consequently contributing to the inhibition of harmful eating habits, this study seeks to understand what educational strategies and practices could contribute to the creation of healthier eating habits of children and their families. In this context, the main objective of this study is to understand the influence of the media on the dietary choices of children and their families and to analyse later the impact of educational strategies promoting healthy eating habits in children's awareness.

This study was carried out with three groups of children one of the day-care centres with 2 years old, other of preschool education with 5 years old, and another group with children with 6 and 7 years old attending the 1st year primary education. Considering the nature of this study a mixed quantitative and qualitative perspectives were used. The quantitative data were collected from a questionnaire applied to the parents and analysed statistically. Qualitative data were collected using direct and participant observation, field notes recorded in the course of action and children's productions. All these data were submitted to content analysis, to better understand the phenomenon under study. There are several similarities with action research, since it seeks to understand the school and family contexts and implement actions in order to about it, although it does not observe cycles of investigation, because of the short time-horizon in which it was developed.

The interpretation was performed through triangulation of the data. The results reveal that there is a set of foods that children's choices but not always that choices are healthy. It is observed that the children are influenced by the media, since, among the most preferred foods appears on media publicity. Another conclusion is that most of the media advertised food are rich in sugar, grease and salt. It turns out that many parents or other caregivers do not recognize such influence, either in themselves or in children. The experiences of learning, the discussion and the reflection have helped children to become more aware of the effects of advertising on their food's options and on the importance of making the best choices in their diet.

Keywords: advertising, media's influence, preschool educations, primary education.

## 1 FOOD CHOICES AND THE INFLUENCE OF THE MEDIA

The research about the effects and influence of advertising in children's eating habits is scarce in Portugal. For this purpose, this study aims to contribute to the strengthening of knowledge in this area and to the development of educational practices promoting the construction of healthy eating habits and, at the same time, of media literacy.

## 1.1 Children's food preferences

Children have pre-established food preferences, which have consequences for their health. Food preferences are understood as the innate tendency to choose salty, sweet, and more familiar flavours, and to refuse bitter, sour, and new, or unknown, flavours (food neophobia). The human being is predisposed to define his food preferences through his interaction with the surrounding context as well as with the food intake, which results from experimentation on the taste of food [1].

Children tend to prefer sweet-tasting food such as soda, sweets (such as candy, gums, etc.), snacks and quick meals, carbohydrate and saturated fat rich food. Excessive consumption of these foods can lead to “fiber, vitamins and minerals deficit to the body” [2, p. 4].

Orsi and Crisostimo confirmed with their investigation that, during the intercalary meals (in the morning or in the afternoon), most of the children are influenced by the opinion of their friends, being ashamed to take fruit to school [2]. They observed that the food label, more precisely their image, is a decisive factor for the purchase. The authors also confirm that most children feel like eating specific food after watching their advertising.

## 1.2 The influence of the media

There are several factors that influence children's food choices. Rodrigues classifies them as endogenous (e.g. allergies or intolerances) and exogenous (e.g. economic, ecological, cultural, political and religious factors) [3]. Food products that are popular in advertising (media-driven) are exogenous, promoting off-the-shelf, readily available on the market, tasty and economically accessible food.

The media has a lot of influence on children's thinking. The word “media” is used with the same meaning for the press, television, online networks and others [4]. In the scope of this study we consider the definition of media for all media that uses advertising. Some studies have shown the negative effects of children's excessive exposure to TV [3]. This study refers that Portugal was the country with the highest daily TV consumption, with around 1500-2000 hours/year for adults in front of the TV. It also refers that children spend about 4/5 hours a day watching TV and from six to seven hours a day viewing the various media (magazines, radio, newspapers, games, others).

TV has a strong influence on children's food choices, and advertisement of food has a major impact on them. The problem is even more relevant because most of the advertised foods are high in fat, sugar and salt [1], stimulating the consumption of unhealthy food and, consequently, increasing the probability to develop several diseases.

## 1.3 Educate for the media

The diffusion of the media had a great impact on societies. This social phenomenon has generated numerous evolutionary changes in the lifestyle of societies, considering habits, customs, thoughts and even the understanding of the world. As mentioned previously, this impact has a considerable influence on children, which leads Lurçat to argue that “television shapes the child from the beginning of life” [5, p. 14].

Considering this fact, the United Nations Educational Scientific and Cultural Organization (UNESCO) has published the *Media and information literacy: curriculum for teachers* [6], highlighting the importance of discussing this issue in educational contexts, as well as the relevance of well informed teachers and educators on this subject.

Also, in Portugal, the Ministry of Education produced the Guidelines for Media Education, referring that educating for the media is a pedagogical process that seeks to empower citizens to live critically and actively the ‘communicational ecology’ [7]. This assumption leads us to understand the media literacy as a vehicle for inclusion and citizenship in the information society. It could reduce the risks of exclusion and enable people to live respectfully in a community life [8].

Lifelong media education must be integrated into the learning process in all levels of education, from preschool education to upper secondary education. Educating for the media involves the development of critical reading, to create self-defence methods for pervasive dangers. It also involves considering the media advantages, because media enables children to expand horizons, understand the world around them, build knowledge, contributing to the development of each person's identity. It implies supporting children to become sensitive, active and responsible citizens. This type of pedagogical

intervention may promote social participatory attitudes contributing to “a civic and political alternative to censorship and excessive regulation by the State” [7, p. 6].

## 2 METHODOLOGY

This study aimed to understand the influence of the media on the food choices of children and their families, and to develop educational strategies that promote healthy eating habits in educational contexts. This study was carried out with three groups of children (one from the day-care center, other from the preschool education and another from the primary school). In this document the data collected during the practicum in these three contexts are presented, comparing the collected data, whenever possible.

It is an exploratory study that seeks to understand how educational practices can contribute to a more conscious view of children and families in relation to this research issue. This type of study aims to provide greater familiarity with the problem, in order to make it more explicit or to construct hypotheses.

### 2.1 Data collection techniques and instruments

Data collection was performed with the instruments and techniques that we believe are more successful in this context. In practice, a questionnaire was designed and validated by two specialists and applied for pre-test before application. It was applied to 47 families (from the context of preschool education and primary education), and 32 responses were received and considered valid. It was transcribed into a Google form, imported into a Comma Separated Values (CSV) file and processed using the R tool, gathering descriptive statistics information.

This research topic was first originated in the day-care context as a child explored a supermarket brochure. A two-year-old child identified food of her choice, observing that there was a link between her preferences and the foods in the advertising brochure. Considered this, various teaching-learning experience (TLE) were designed with two main objectives: (i) to understand if the media influences their food choices (TLEA1 - classifying food; TLE2 - story with advertisements); and (ii) promote a more realistic view of food advertising and healthy eating habits (TLE3 - the search for sugar in beverages; TLE4 - tasting and discovering).

#### 2.1.1 *Brief description of the Teaching-Learning Experiences*

TLE1 - Classifying food - promoted in all three contexts. In the day-care center, children have to choose from a variety of food clippings (healthy, unhealthy and various brands) from leaflets. A dialogue was held to understand the reasons for each child's selection. In the other two contexts children were expected to rate these cuts as “tasty” and “non-tasty”.

TLE2 - History with advertisements - developed with the preschool and primary school children, the experience consisted in visualizing a story (video or motion picture) with advertising breaks. Each advertising break contained a set of commercials (well-known at the time). Afterwards, the children built a meal of their choice, pasting clippings of advertising leaflets (containing the advertised food, unbranded alternatives, and healthy choices - like fruits, vegetables, water and others).

TLE3 - Looking for sugars in beverages - developed with preschool and primary school children. We used some instruments to perform the experiment: on a scale, test tubes and support, goblins, funnel, sugar packets and beverages (e.g. Bongo, Compal, Iced Tea, Coca-Cola, Trina, Capri-Sonne, Fanta, chocolate milk, plain milk and water). At first, we jointly discovered the word sugar in the nutritional table and its value. We weighted the amount of sugar from each drink by comparing the values and building a graph with the corresponding number of sugar packets. As a way of deconstructing the perception that all foods containing unhealthy sugar, a further activity was developed later to “look for the natural sugars in food” which consisted of adding to various foods (bread, rice, bananas, potatoes, pasta, among others) iodized water to discover the presence of starch in them, by its dark blue color.

TLE4 - Tasting and discovering - developed in the three contexts, considering the specificities of each educational context. In the day-care context, the experience consisted in presenting different fruits and let children taste what they wanted to taste. In preschool and primary school contexts, children were blindfolded to try a variety of foods (fruits and vegetables) and try to identify the food, first by smell, then by taste, and classify them as “tasty” and “non-tasty” referring whether they knew it or not.

TLE5 - What's in my lunchbox? - this experience, developed in the preschool and primary school contexts, consisted in analyzing each other's lunch boxes, referring to the least and healthiest set, as well as which food we should remove or add to make a healthy lunchbox.

### 2.1.2 Analysis Categories

During the learning strategies, observation was used as a data collection technique. They were recorded in the form of field notes in order to provide a distance from practice. The day, context of observation, adult action, child's action and the dialogues were recorded. Subsequently, content analysis was performed, creating categories of analysis and interpreting the emerging data. From TLE1, the following categories emerged: food liked, and not liked. From TLE2 the following categories emerged within the desired food: branded food, unbranded food, and healthy choices. From the TLE3 the following categories emerged: food with unhealthy sugar and food with healthy sugar. From the TLE4 in day-care context emerged: fruits chosen and tried, and fruits not chosen. In the remaining contexts the following categories emerged: for fruits and vegetables, separately appeared: tasty and non-tasty (blindfolded), tasty and non-tasty (eyes uncovered) and chosen (eyes uncovered)).

The following categories emerged from TLE5: frequent foods in the morning snack and frequent foods in the afternoon snack and in each advertised brand.

## 3 RESULTS

The questionnaires delivered to the families of preschool and primary school children had the same structure, which allowed us to carry out a comparative analysis. A total of 32 questionnaires, were answered by the child's mother (90.6%). The participants were children aged between 5 and 7 years old, male and female, observing that 58.1% of them were 6 years old female. Families and children were exposed to advertising (100%) using daily the media. Preschool children were more exposed to advertising (3h / day) than primary school children (1h / day).

Cartoons were the most watched television show. The majority of adults considered that neither they (75%) nor their children (59.4%) were influenced by advertising. However, when they admitted that possibility, it was only on children's influence (40.6%).

Some parents assumed that when children saw advertising, they asked the parents to buy the product, but they would only agree to buy it if there was a "quality" and "trustworthy" product (Figure 1). At the time of purchase, parents opted for what was healthier for their children (84%).

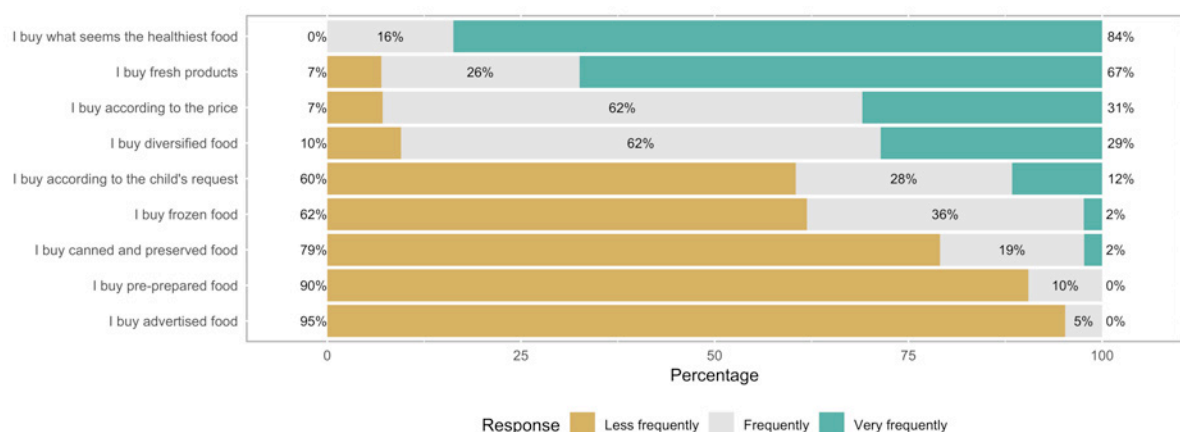


Figure 1 – Food selection attitudes.

The most consumed foods, four or more times per week, were water (100%), milk (84%), soup (77%), fruit (77%) and cereals (71%). Foods that was never consumed included hamburgers (52%), food with added sugar and pizza (35%), fodder legumes and whole cereals (25%) (Figure 2).

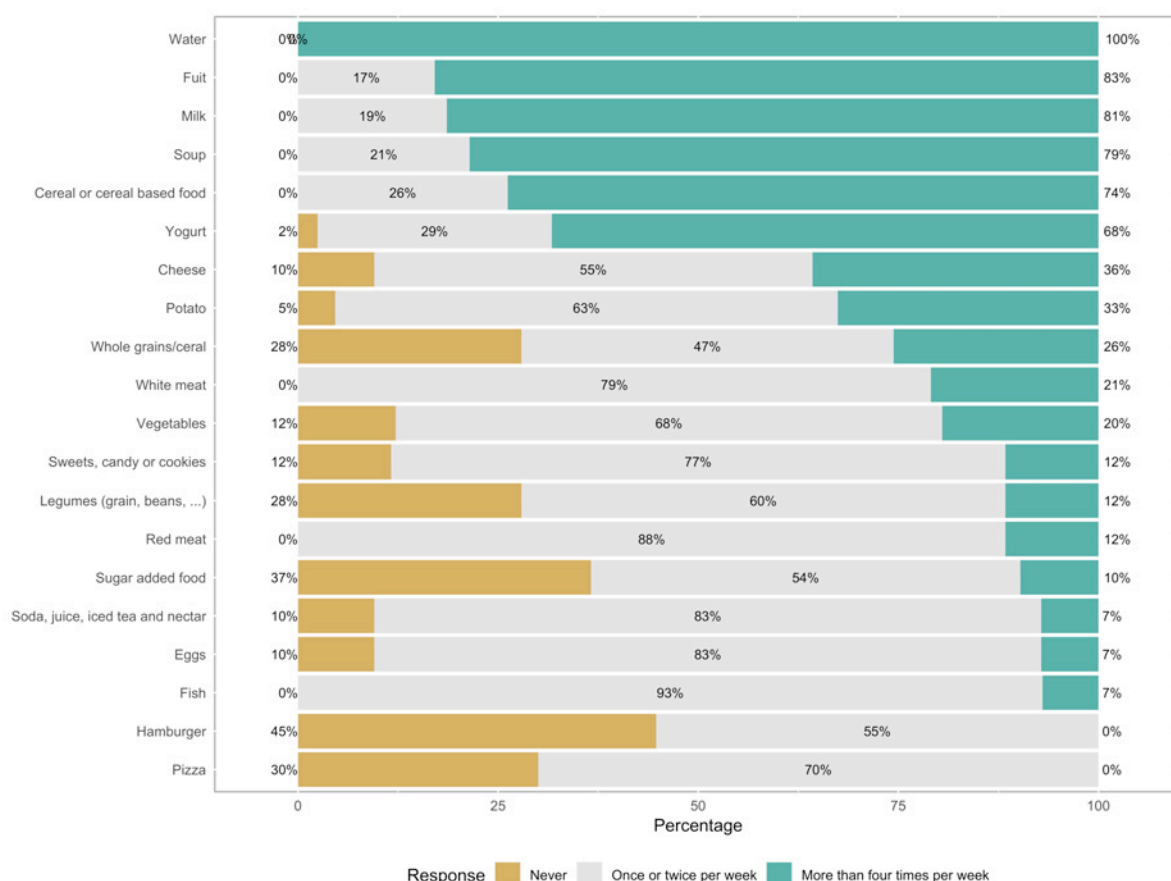


Figure 2 - Food consumption frequency

The most consumed brands, four or more times a week, were Azorean Milk (30%), Yoco yogurts and chocolate milk (21%), Chocapic cereals (15%), jelly (14%) and the cheese *Vaca que Ri* (13%). Three times a week they consumed Pescanova's golden candies (82%), jelly (75%), Manhãzitos pancakes (63%) and chocolate Kinder (62%). All the advertised foods were mentioned as consumed, but many of them in the unbranded version. Adults (77.4%) considered that their children have healthy eating habits (Figure 3).

The comparison of the questionnaires between children of preschool and primary school children, stresses that primary school children were eating healthier than the children of preschool education. These data were also confirmed by the observations, since the juices of primary school children were replaced by yogurts, and a higher consumption of fruit was observed. Still, we cannot say that there was no influence of advertising, since in all contexts it was observed that children often brought advertised food for snacks.

From the data obtained in the TLE1, with regard to the day-care context, that included 16 children, the most chosen food was mentioned in advertising, such as Lay's French Fries (69%), Oreo cookies (63%), *Manhãzitos* pancakes (38%), *Vaca que Ri* Cheese (38%) Nestlé fruit (38%) and the Compal Essential (38%). Considering the preschool education context, involving 19 children, they chose as preferred food, Compal Essential and ham (78.9%) and Trina juice, Manhãzitos and pizza (73.7%). The least selected food were hake medallions, onion, meat and Joy juice (5.3%). For the primary school children, involving 25 children, the most chosen foods were Noddy Easter Eggs (100%), Milka Biscuits (96%), Lay's French Fries (92%), Chocapic Cereals, Trina juice (88%) and water (88%).

The most preferred food in the area of non-taste were lemon (80%), tuna (72%), ham (72%), Pepsi (68%), Belgian wafers (64%), peas (64%), fruit Blédina (64%) and cheese sliced (64%). We noticed the influence of publicity, since Joy juice (not advertised) was in the least chosen and Trina juice (advertised) was one of the most chosen.

Regarding TLE2, it was explored with 43 children. They knew the publicity, sang their songs, repeated lines and established preferences. The children consume the food advertised, since they said, "I went

to the supermarket and bought this food!". When they conceived the desired meal, the food most chosen were the ones advertised.

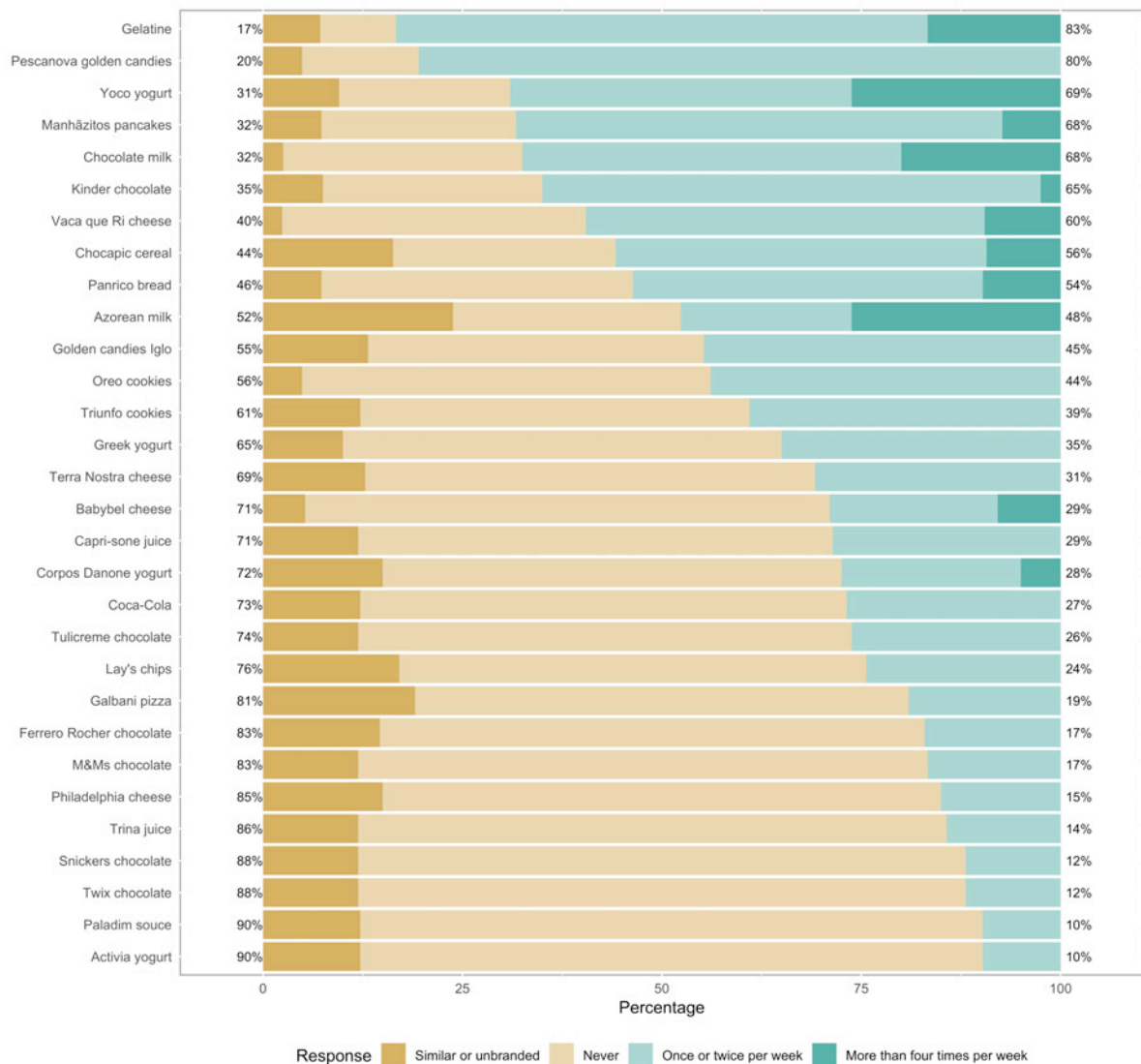


Figure 3 - Consumed brands.

The most preferred food for preschoolers was Cereals Lion (15 choices) and for primary school children was the Compal Essential (21 choices). This food was present in the advertising presented, being one of the most appreciated and commented. We noted that the least chosen foods were advertised as unbranded version and healthy choices (fruits, vegetables...).

With TLE3 we reflected on the stereotype that assumes that because juice "has fruit, it is healthy". We confirmed the astonishment of children when they realize the amount of sugar present in some drinks consumed by them. Some referred: "I bring this juice for lunch every day and it has so much sugar". We noticed a slight change in their choices, preferring drinks with less sugar like water and plain milk. With the practical activity of the starch demand in the food the children have verified that they can find sugar healthy and necessary for the organism in non-advertised food.

In TLE4, we confirmed the existence of food neophobia in unknown foods, with a higher incidence at lower ages. When they were blindfolded (preschoolers and primary school children), they were afraid to try new flavors, being reluctant if they didn't know the taste and texture of the food. There was a greater preference for fruits than for vegetables. The preschoolers who wanted to repeat the vegetables were rare. In primary school the most chosen vegetable was the carrot. Few preschoolers wanted to try new foods on their own initiative, while in primary school a significant number of children asked to try food they did not know.

Finally, in TLE5, we found that children's snacks were mostly healthy and did not have a great influence on advertising. The morning snacks were mostly made up of yogurts, chocolate milk or juice and pastry cakes, wafers or packaged pancakes. The afternoon snack consisted of biscuits or chocolate cakes, cheeses, yogurts, juices and breads. The most consumed brands were advertised brands, being the most frequent in preschool education, Compal, Oreo, Vaca que Ri, Manhãzitos, Dinosaurs, Nestlé, Babybel and Bongo. In primary school the choice falls to Yoco, Suissinho, Actimel, Compal, Oreo, Manhãzitos, Dinosaurs and Bongo. After the activity of analysis and reflection on the content of the lunch boxes we noted that the snacks continued to integrate advertised food, but that started to include fruit.

## 4 CONCLUSIONS

We conclude that the children in this study were exposed to the media. They were influenced by advertisement, although many parents do not assume it. Advertising stimulates their attention with songs and the presentation of an ideal world. They found advertisement not only on television, but in all types of media.

Advertising discloses, in its totality, unhealthy foods, with high percentage of added sugar, fat and salt. Parents buy these food thinking that they are a good choice. This study shows that children and their families are influenced by advertising, even without the perception of it. However, consumption is more focused on advertised food, although in its unbranded form, because it is a more economical choice.

We note parental concern about providing healthy food to their children. The problem is that these have the wrong concept of what is healthy. In this sense, it is fundamental to work with food while working on the factors that influence it. It is necessary to involve the parents and to educate them while educating the children, since it is they who make the most decisions feeding.

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